

## LOW FLYING AIRCRAFT

Canadian Aviation Regulations (CARs) 602.14-602.16, prescribes 1,000 feet above the highest obstacle located within a horizontal distance of 2,000 feet from the aircraft as the minimum altitude that an aircraft may over-fly a built-up area (500 feet for water), unless the aircraft is conducting a take-off, approach or landing. Other exemptions may apply – kindly refer to the CARs for the exact wording. This regulation is enforceable by Transport Canada Civil Aviation Enforcement. If you suspect an aircraft of operating too low or in an unsafe manner, details of the incident should be provided to Transport Canada at the following:

Transport Canada  
620 - 800 Burrard Street  
Vancouver, BC V6Z 2J8  
Email: [services@tc.gc.ca](mailto:services@tc.gc.ca)

In most cases, aircraft operating over the Lower Mainland are flying at altitudes consistent with that prescribed by the regulations and published procedures. Nevertheless, there are several regular operations that would normally raise questions from the community. Some of these operations are described below.

### Instrument Landing System – Flight Check

The Instrument Landing System (ILS) provides critical information for aircraft on approach to assist with landing on the runway. There are five ILS at YVR, and these are owned and maintained by NAV CANADA, the company responsible for providing air traffic control and aeronautical services in Canada.

Routine maintenance of the ILS is required to ensure stringent certification standards prescribed by Transport Canada are met. After maintenance work is completed, the system must be 'flight checked'. This involves having a specially-equipped jet aircraft (a CRJ-200) fly simulated approaches to verify that the system is operating within tolerances.



*NAV CANADA CRJ Flight Check Aircraft*

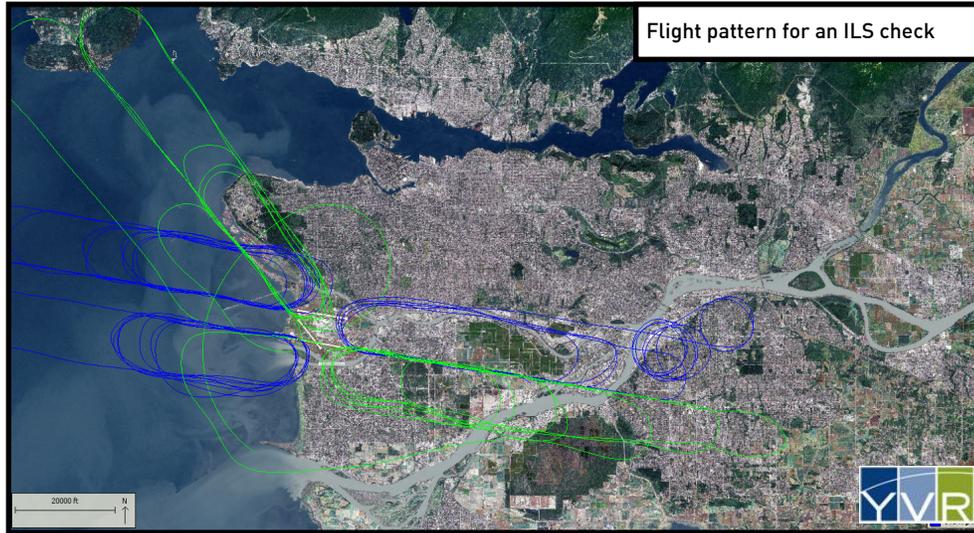
The duration of a flight check depends on the type of maintenance done to the system and may last between 2-4 hours.

The simulated approaches flown during the flight checks are unique in that the aircraft typically breaks off its approach at a very low altitude once it is over the threshold of the runway – turning and climbing away from the runway to initiate the next approach. When these

checks are being conducted, concerns raised by the community are often related to safety as the aircraft will be seen operating at lower altitudes compared to other aircraft.

The Airport Authority places community advisories on the airport website – [www.yvr.ca](http://www.yvr.ca) – to inform the community of upcoming ILS checks. These advisories notify the community to anticipate unusual operations while the checks are being conducted.

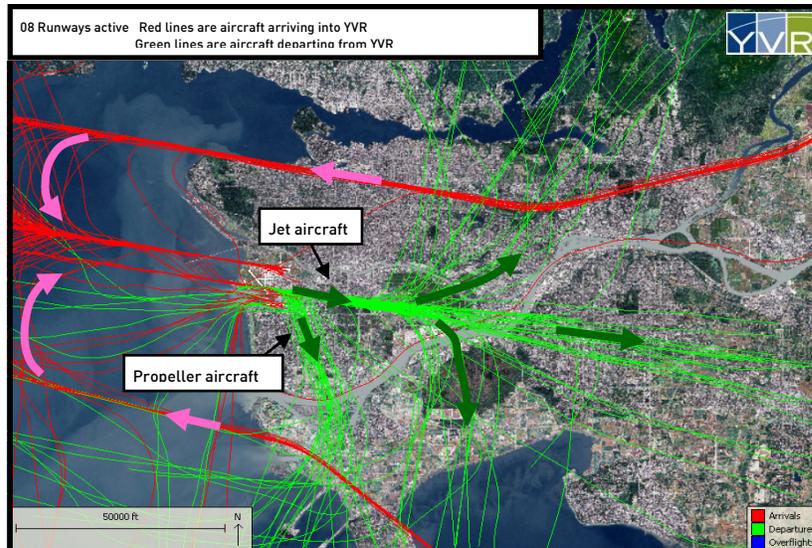
The figure below depicts sample flight path of the ILS flight checks on various runways. Each ILS flight check has a slightly different flight path, and each check requires a different number of circuits.



**Propeller Aircraft Over the City of Richmond**

Concerns related to propeller aircraft over the City of Richmond are often raised by residents when runway 08 is active – i.e. departures over the City and arrivals over the water.

While jet aircraft are normally required to climb along the runway heading to an altitude of 3,000’ before proceeding on course, propeller aircraft are normally assigned turns soon after they take-off due to aircraft spacing and capacity reasons. Turning propeller aircraft in this manner is consistent with operations at other busy international airports and is a critical element in allowing NAV CANADA to manage the diverse fleet of aircraft at YVR – an almost 50/50 split between jet and propeller aircraft. The figure below illustrates typical flight paths of jet aircraft and propeller aircraft departing from runway 08.



### **Air Ambulance**

There are some operators at YVR that provide both helicopters and fixed-wing aircraft to support the BC Air Ambulance Service. These aircraft and their crew are on-call 24-hours a day to transport patients between remote BC locations and Metro Vancouver hospitals, or to attend accident scenes to air lift injured individuals.

Due to the needs of the patient and time sensitivity, air ambulance aircraft are often expedited and given the shortest route. In addition, some injuries may also require flights at lower altitudes.

### **Circling Aircraft / Helicopters**

Circling aircraft and helicopters over the Metro Vancouver area are often related to filming, photoshoots, survey work, news and traffic reporting, or policing activities.

For example, "AIR 1" is a helicopter operated by the RCMP for their community policing efforts and supports various police forces in the Metro Vancouver area. The following web link provides further details on AIR 1 operations:

<http://bc.cb.rcmp-grc.gc.ca/ViewPage.action?siteNodeld=23&languageId=1&contentId=10002>

*Should you require more information or if you have questions, please contact the YVR Noise Management office at [noise@yvr.ca](mailto:noise@yvr.ca).*